EXTENSION

Utah State UNIVERSITY

Pigeon Fever in Utah Horses

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Pigeon Fever is infecting horses in several Utah locations and is expected to spread. The disease was first recognized in the Uintah Basin about the middle of June 2003 and appeared at several locations within a few days. It has been diagnosed since then in a number of local areas in the Uintah Basin and also in several other sites in Utah.

A bacterial organism, *Corynebacterium pseudotuberculosis*, causes Pigeon Fever. It causes massive swelling of the pectoral muscles, at the front of the brisket, making the protruding muscles look like the breast of a pigeon. The disease has no other connection to pigeons. It has been a problem in California for many years, with at least some cases reported each year and large scale outbreaks other years. It usually occurs only in horses and cattle, although it could cause lesions in other animals or humans through contamination from the abscess discharge.

Once cases begin to occur in a local area, others can be expected in horses located near-by, although not all horses or all groups of horses are affected in a given location. A major factor involved in transmission during the current outbreak is probably the horn fly. Prevention efforts should include repellents that help keep horn flies from landing on and biting horses, especially along the underside of the horse in the brisket and belly area. This may not prevent all cases, but it currently appears to be the best preventive available.

Some insect repellents are not insecticides since the chemical action is to repel, not kill. However, other products may cause lethal effects if the concentration is high enough and insects are unable to move away rapidly. The vast majority of insecticide use on horses is in the form of fly repellents or a combined repellent and insecticide. Many products are also labeled for use against ticks, lice and other equine ectoparasites. Horse owners expect on-animal pesticides to repel flies. Usually house and biting fly populations around horses are high enough that killed flies are quickly replaced. So, the apparent efficacy is nil with products that just kill flies.

The horn fly is similar to the housefly in appearance but only half the size and its wings are set at a distinctive angle. They bite and suck blood from their hosts, in contrast to the housefly, which does not bite. Horn flies generally lay their eggs only in fresh cow manure, making cattle their preferred host, but they will also attack other animals, including horses. These flies will readily fly three miles and as far as 10 miles to find a host animal. They tend to stay in swarms and move as a group to different sites on the animal, depending on the "tail swish" action and the air temperature. During the heat of the day they prefer and move to the shade of the underside of the animals and commonly cause skin lesions in this area. Horn flies tend to stay on the same host, but if they are disrupted and other host animals are nearby, they will move to a new host animal.

Horse owners can reduce the potential spread of Pigeon Fever by restricting movement of horses with draining abscess lesions. Besides the contamination of the ground from the draining lesions, the horn flies will go along with the horses to the new area and may move to other horses. Owners should voluntarily confine affected horses until two to four weeks after all draining lesions have healed on each infected horse. Horse shows or other events that bring horses together should arrange to visually inspect all horses and remove any horses with draining lesions.

Though the pectoral area is most commonly affected, there may be swelling of the sheath, udder or groin area or even on the head or rump area. Many of the swollen areas will eventually form abscesses. It is common to find lesions on the underside of the horse just a few inches behind the front legs. The healing process will be enhanced if, when ready the abscesses are lanced, drained and kept open so they heal from the inside out. There may be multiple abscesses in the same muscle area. Using injectable antibiotics prior to draining the abscesses seems to prolong the disease process. It is recommended that you consult your veterinarian about treatment of specific cases.

Horses in at least two locations have shown very small ulcerative lesions on the hocks and lower parts of the rear legs, but sometimes with swelling of the lower legs. This form is called ulcerative lymphangitis but is caused by the same organism and would be easy to overlook in some horses or even a group of horses.

This publication is issued in furtherance of Cooperative Extension work. Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Jack M. Payne, Vice President and Director, Cooperative Extension Service, Utah State University.